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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/540,925

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EXAMINER

CHOW, YUK

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

05/12/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/540,925	Applicant(s) LEE ET AL.	
	Examiner YUK CHOW	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 7-14, 19-24 and 26-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 15-18 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,2, 15, 16 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Mohri (US 6,515,669).

As to **claim 1**, Mohri discloses a method of configuring a three-dimensional (3D) information input device which performs information input operations using a finger device that is worn by a user and senses the user's finger movement, the method comprising steps of:

recognizing whether the user is wearing the finger device (Fig. 1(5)) and recognizing finger positions of the finger device (Fig. 1(1)); and

adaptively configuring the 3D input device based on the recognition results (see Col. 11 lines 55-62 and Fig. 15, different processing modes).

As to **claim 2**, Mohri discloses the method of claim 1, wherein adaptively configuring the 3D input device comprises:

adaptively configuring a signal-processing unit (Fig. 1(11)), which processes movement signals sensed by the finger device, based on the recognition results (see Fig. 5 and Col. 6 lines 14-32); and

adaptively configuring a device driver of the 3D input device based on the recognition results and basic set-up information used for information input (See Col. 9 lines 10-16).

As to **claim 15**, Mohri discloses a three-dimensional (3D) input device, which is adaptively configurable and performs information input operation using a finger device that is worn by a user and senses the user's finger movement, the 3D input device comprising:

a pre-processing unit which recognizes whether the user is wearing the finger device and recognizes the finger positions of the finger device (Fig. 1(1, 5)); and

a signal-processing unit (Fig. 1(11)) which is adaptively configured to process movement signals output from the finger device worn by the user based on the recognition result of the pre- processing unit (see Col. 6 lines 14-32).

As to **claim 16**, Mohri discloses the 3D input device of claim 15 further comprising a device driver (Fig. 19A(22)), which is adaptively configured to process the movement signals output from the signal- processing unit based on the recognition result of the pre-processing unit and basic set-up information for information input (See Col. 9 lines 10-16).

As to **claim 25**, Mohri discloses the method of claim 1, wherein the recognizing finger positions of the finger device comprises recognizing the position of each of a plurality of fingers (see Fig. 2 and 3).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-6 and 17-18 rejected under 35 U.S.C. 103(a) as being unpatentable over Mohri in view of Rafii et al. (US 6,512,838).

As to **claims 3 and 17**, Mohri discloses the method of claims 2 and 16 respectively above.

However, Mohri does not teach the basic set-up information includes input scenario information related to arrangement of information items that are selected by finger movement and a language used for information input.

Rafii discloses methods for data acquired system wherein teach basic setup information including a language used for input (see Col. 8 lines 46-63).

It would have been obvious to one ordinary skill in the art at the time of invention was made to incorporate basic set-up information including language of Rafii into a method of configuring a three-dimensional (3D) information input device of Mohri, because this further promoting flexibility (see Rafii Col. 8 lines 46-63).

As to claims **4 and 18**, Mohri discloses the method of claims 2 and 17 respectively above.

However, Mohri does not teach an application configures a soft keyboard based on the recognition results and the basic set-up information, when the application receives the recognition results and the basic set-up information from the device driver.

Rafii discloses methods for data acquired system wherein teach an application configures a soft keyboard (Fig. 1c(115)) based on the recognition results and the basic set-up information from device driver (see Fig. 3(200) and Col. 18, lines 39-56).

It would have been obvious to one ordinary skill in the art at the time of invention was made to incorporate an application configures a soft keyboard of Rafii into a method of configuring a three-dimensional (3D) information input device of Mohri, because this further promoting flexibility (see Rafii Col. 8 lines 46-63).

As to **claim 5**, Mohri and Rafii disclose the method of claim 4, wherein the application outputs the configured soft keyboard to an output device (see Rafii Fig. 3(80)).

As to **claim 6**, Mohri and Rafii disclose the method of claim 5, wherein the soft keyboard displays finger positions of the finger device on an array of information items that are selected by finger movements (see Fig. 1C and Col. 10 lines 9-39).

Response to Arguments

5. Applicant's arguments filed 02/24/2009 have been fully considered but they are not persuasive.

Regarding claim 1, applicant argues that Mohri's disclosure does not teach "configuration of the 3D input device based on the recognition results". However, examiner respectfully disagrees, for example, Mohri uses hand shape detection to generate a **control command** based on the recognition results. This is sufficient for the teaching of "**configuration** of the 3D input device based on the recognition results", since a control command is a type of configuration which is more specific than applicant's claimed limitation "configuration".

Applicant also argues that Mohri's configuration does not change regardless the hand and finger positioning. However, examiner respectfully disagrees, for example, Fig. 15 of Mohri teaches different processing modes based on the hand shape input, hence, change in configuration (see Col. 11 lines 41-54).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2629

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUK CHOW whose telephone number is (571)270-1544. The examiner can normally be reached on 8-6 M-TH E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. C./

Examiner, Art Unit 2629

/Amare Mengistu/

Supervisory Patent Examiner, Art Unit 2629